

What is claimed is:

1. A method for correlating data from images produced by different sensors, the method comprising:

5       spatially matching images produced by different sensors; and  
      spectrally correcting one or more of the spatially matched images based on one or more of the other images.

2. The method of Claim 1, wherein spatially matching includes equalizing resolution levels in the images.

10       3. The method of Claim 2 wherein spatially matching further includes:  
      setting a plurality of control points in the images based on landmark information;  
      and  
      aligning the images based on the set control points.

15       4. The method of Claim 3, wherein setting the plurality of control points includes:  
      a. determining locations of a plurality of landmarks within a geographic area associated with the images;  
      b. displaying one of the images;  
      c. adjusting the displayed image to present a selected landmark;  
      d. setting a control point associated with a visual feature that is approximately  
20       adjacent to the selected location of the landmark; and  
      e. repeating c-d until a threshold number of control points have been set; and

5. The method of Claim 3, wherein the landmark information includes schools.

6. The method of Claim 5, wherein the visual feature is one of a soccer field, a football field, a quarter mile track, or a baseball field.

25       7. The method of Claim 3, wherein each of the plurality of images includes a plurality of multispectral bands set to equalized resolution levels.

8. The method of Claim 7, wherein each of the multispectral bands are sampled at various first resolution levels and the set resolution level is the highest of the various first resolution levels.



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9. A system for correlating data from two or more satellite images from different sensors, the system comprising:

means for spatially matching images produced by different sensors; and  
means for spectrally correcting one or more of the spatially matched images based  
on one or more of the other images.

10. The system of Claim 9, wherein the means for spatially matching includes means for equalizing resolution levels in the images.

11. The system of Claim 10, wherein the means for spatially matching further includes:

means for setting a plurality of control points in the satellite images based on landmark information;  
means for aligning the images based on the set control points; and  
means for aligning the images based on the center latitude and center longitude of the base image.

12. The system of Claim 11, wherein the means for setting includes:

means for determining locations of a plurality of landmark within a geographic area common with the satellite images;  
means for displaying one of the satellite images;  
means for selecting one of the plurality of landmarks;  
means for adjusting the displayed satellite image to present the selected landmark based on the determined location; and  
means for selecting a control point associated with a visual feature that is approximately adjacent to the selected landmark.

13. The system of Claim 12, wherein the landmark includes schools.

14. The system of Claim 12, wherein the visual feature is one of a soccer field, a football field, a quarter mile track, or a baseball field.

15. The system of Claim 12, wherein each of the plurality of satellite images includes a plurality of multispectral bands set to equalized resolution levels.

16. The system of Claim 15, wherein each of the multispectral bands are sampled at a plurality of first resolution levels and the set resolution level is the highest of the plurality of first resolution levels.



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17. A system for aligning a plurality of satellite images from different sources, the system comprising:

a user interface device;

a display device;

a database for storing landmark information; and

a processor coupled to the user interface device, the display device, and the database, the processor including:

a first component for instructing the display device to present one of the satellite images based on the stored landmark information;

a second component for setting control points in the satellite images based on a signal generated by the user interface; and

a third component for aligning the images based on the set control points.

18. The system of Claim 17, wherein the landmark includes school information.

19. The system of Claim 18, wherein school information includes location information.

20. The system of Claim 17, wherein the user interface includes a first component for selecting landmark information from the database.

21. The system of Claim 17, wherein the user interface includes a second component for selecting a control point on a visual feature in the displayed satellite image that is associated with the selected landmark.

22. The system of Claim 21, wherein the visual feature is one of a soccer field, a football field, a quarter mile track, or a baseball field.

23. The system of Claim 17, wherein each the plurality of satellite images includes a plurality of multispectral bands set to equalized resolution levels.

24. The system of Claim 23, wherein each of the multispectral bands are sampled at various first resolution levels and the set resolution level is the highest of the various first resolution levels.

25. A user interface for selecting control points on a plurality of satellite images from different sources for alignment, the user interface comprising:

a first component for displaying one of the satellite images;



a second component for selecting a landmark from a database of landmarks located within a geographic area common to the plurality of satellite images; a third component for adjusting the displayed satellite image to present the selected landmark; and  
5 a fourth component for selecting a control point associated with a visual feature that is approximately adjacent to the selected landmark.

26. The user interface of Claim 25, wherein the landmark includes schools.

27. The user interface of Claim 25, wherein the visual feature is one of a soccer field, a football field, a quarter mile track, or a baseball field.

10 28. The user interface of Claim 25, wherein each the plurality of satellite images includes a plurality of multispectral bands set to equalized resolution levels.

29. The user interface of Claim 28, wherein each of the multispectral bands are sampled at a plurality of first resolution levels and the set resolution level is the highest of the plurality of first resolution levels.

15 30. A method for correlating data from images produced by different sensors, the method comprising:

spatially matching images produced by different sensors;  
setting a plurality of control points in the images based on landmark information;  
and  
20 spectrally correcting one or more of the spatially matched images based spectral information associated with one or more of the set control points in the images.

31. The method of Claim 30, wherein spectrally correcting includes:  
extracting radiometrically stable data associated with the set control points;  
25 aggregating the extracted radiometrically stable data from a first image from a first sensor having a resolution that is higher than a second image from a second sensor;  
comparing the aggregated data of the first image to the extracted radiometric data of the second image;  
30 generating a correction factor based on the comparison; and  
applying the correction factor to all the radiometric data of the second image.

